FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

BIWEEKLY 2001-03

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FOR YOUR INFORMATION:

Type Certificate Data Sheets (TCDS) issued by the FAA may be accessed at the web site: www.airweb.faa.gov/rgl

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; + - See AD for additional information.

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2000-26-07		British Aerospace	Bae 146 and Avro 146-RJ Series
2000-26-08		British Aerospace	Jetstream 4101
2000-26-09		Dornier Luftfahrt	328-100 Series
2000-26-10		British Aerospace	ATP
2000-26-13		Dornier Luftfahrt	328-300 Series
2000-26-14		Airbus Industrie	A310 Series
2000-26-15	S 2000-07-02	McDonnell Douglas	MD-11 Series
2000-26-20		Gulfstream Aerospace	G-1159A (G-111) Series

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2000-26-03	C S 99-27-10	Airbus Industrie	A310 Series, A300 B4-600, A300 B4-600R, and A300 F4-600R (A-300-600) Series
2001-01-01		BMW Rolls-Royce	Engine: BR700-710A1-10 and BR700-710A2-20
2001-01-02		British Aerospace	HP137 Mk1, Jetstream Series 200, and Jetstream 3101 and 3201
2001-01-03		British Aerospace	HP137 Mk1, Jetstream Series 200, and Jetstream 3101 and 3201
2001-01-05		Dassault Aviation	Falcon 10 Series and Mystere Falcon 50
2001-01-06	S 94-04-05	Airbus Industrie	A300 B2 and A300 B4 (A300), A300 B4-600, A300 B4-600R, and A300 F4-600R (A300-600) and A310 Series
2001-01-07		Airbus Industrie	A300 B2, A300 B4, A300 B4-600, A300 B4-600R, A300 F4-600R, and A310 Series
2001-01-08		British Aerospace	Jetstream 4101
2001-01-09	S 99-26-12	Airbus Industrie	A330-301, -321, and -322 Series and A340-211, -212, -213, -311, -312, and -313 Series
2001-01-10		Boeing	747-400, 747-400F, 767-200, and 767-300 Series
2001-01-12		Construcciones Aeronauticas	CN-235, CN-235-100, and CN-235-200 Series
2001-01-13		Boeing	737-300, -400, and -500 Series
2001-02-01		Boeing	737-300, -400, and -500 Series
2001-02-02		Bombardier	DHC-8-201, -202, -301, -311, and -315
2001-02-51	E	Empresa Brasileira	EMB-145 and EMB-135 Series

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2000-25-51		Rolls-Royce Deutschland	Engine: BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30
2001-02-05	S 00-01-51	Bombardier	CL-600-2B16 Series (CL-604)
2001-02-06	S 97-26-06	Embraer	EMB-120 Series
2001-02-07		Boeing	767 Series
2001-02-08		Short Brothers	SD3-60 SHERPA, SD3-SHERPA, SD3-30, and SD3-60 Series
2001-02-09	S 97-06-04	Boeing	757-200 Series
2001-02-12		CFM International	Engine: CFM56-7B
2001-02-51		Embraer	EMB-145 and EMB-135 Series
2001-03-01		Israel Aircraft Industries	Galaxy Airplanes
2001-03-02		Pratt & Whitney Canada	Engine: PW306A and PW306B
2001-03-52	E	Bombardier	CL-600-2B16 (CL-604) Series

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ROLLS-ROYCE DEUTSCHLAND
AIRWORTHINESS DIRECTIVE
ENGINE
LARGE AIRCRAFT

2000-25-51 Rolls-Royce Deutschland GmbH: Amendment 39-12098. Docket 2000-NE-54-AD.

Applicability

This airworthiness directive (AD) is applicable to certain Rolls-Royce Deutschland GmbH (formerly BMW Rolls-Royce GmbH) model BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines that are listed by serial number in Table 1 and Table 2 of this AD, and that have a high pressure turbine (HPT) stage 1 disk, part number (P/N) BRH20009, BRH20010, BRH12167, BRH12168, BRH12466, or BRH12467 with a SN that is listed in Table 1; or a stage 2 disk, P/N's BRH19349 or BRH19350 with a SN that is listed in Table 2. These engines are installed on but not limited to McDonnell Douglas Corporation 717 airplanes.

Note 1: This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Compliance with this AD is required as indicated, unless already done.

To prevent an uncontained failure of the HPT stage 1 or stage 2 disk due to exceeded life-cycle limits, do the following:

(a) Remove HPT stage 1 disks listed in Table 1 before exceeding the cycles-since-new (CSN) in the "Replace By" column, and replace with serviceable disks.

Table 1. HPT Stage 1 Disks By Engine SN, Disk P/N, and Disk SN

Engine Serial Number	Disk P/N	Disk SN	Replace By
13111	BRH12466	312	2600 CSN
13112	BRH12466	308	2600 CSN
13113	BRH12167	130	2600 CSN
13118	BRH12467	330	2600 CSN
13119	BRH12467	319	2600 CSN
13120	BRH12467	331	2600 CSN
13139	BRH12168	154	2600 CSN
13174	BRH20010	380	2600 CSN
13175	BRH20010	381	2600 CSN
13176	BRH20010	378	2600 CSN
13178	BRH20009	221	2600 CSN
13179	BRH20009	211	2600 CSN

Engine Serial Number	Disk P/N	Disk SN	Replace By
13180	BRH20009	228	2600 CSN
13182	BRH20009	204	2600 CSN
13183	BRH20009	205	2600 CSN
13184	BRH20009	230	2600 CSN
13185	BRH20010	377	2600 CSN
13177	BRH20010	376	3600 CSN
13181	BRH20009	199	3600 CSN
13186	BRH20010	366	3600 CSN
13187	BRH20009	224	3600 CSN
13192	BRH20009	202	3600 CSN
13193	BRH20009	225	3600 CSN

(b) Remove HPT stage 2 disks listed in Table 2 before exceeding 3800 CSN, and replace with serviceable disks.

Table 2. HPT Stage 2 Disks By Engine SN, Disk P/N, and Disk SN

Engine Serial Number	Disk P/N	Disk SN
13111	BRH19349	316
13112	BRH19349	318
13114	BRH19349	317
13120	BRH19350	301
13138	BRH19350	334

(c) After effective date of this AD, do not install any HPT stage 1 or stage 2 disks except as allowed by paragraphs (a), (b), or (d) of this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

Effective Date of This AD

(f) This amendment becomes effective on February 20, 2001 to all owners and operators except those to whom it was made immediately effective by emergency AD 2000-25-51, issued on December 4, 2000, which contained the requirements of this amendment.

FOR FURTHER INFORMATION CONTACT: James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7176; fax (781) 238-7199.

Issued in Burlington, Massachusetts on January 24, 2001.
Thomas A. Boudreau, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

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BOMBARDIER, INC.
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2001-02-05 BOMBARDIER, INC. (Formerly Canadair): Amendment 39-12089. Docket 2000-NM-80-AD. Supersedes AD 2000-01-51, Amendment 39-11519.

Applicability: CL-604 Variant of Bombardier Model Canadair CL-600-2B16 series airplanes, modified in accordance with Supplemental Type Certificate SA8060NM-D, SA8072NM-D, or SA8086NM-D.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent electrical sparks from a grounded object from coming into contact with the fuel port flood light housing of the fuel service panel, which could result in a fuel fire due to the close proximity of the fuel service panel to the fuel port, accomplish the following:

Modification

(a) Within 90 days after the effective date of this AD, modify the wiring of the fuel port flood light in accordance with the Accomplishment Instructions of Bombardier Service Bulletin TUC-33-30-01-1, dated February 1, 2000, or Revision A, dated March 10, 2000.

Alternative Methods of Compliance

(b) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 2000-01-51, amendment 39-11519, are approved as alternative methods of compliance with this AD.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The modification shall be done in accordance with Bombardier Service Bulletin TUC-33-30-01-1, dated February 1, 2000; or Bombardier Service Bulletin TUC-33-30-01-1, Revision A, dated March 10, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on March 5, 2001.

FOR FURTHER INFORMATION CONTACT: Abby Malmir, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5351; fax (562) 627-5210.

Issued in Renton, Washington, on January 17, 2001.
Dorenda D. Baker, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

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EMPRESA BRASILEIRA DE AERONAUTICA, S.A.
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2001-02-06 EMPRESA BRASILEIRA DE AERONAUTICA, S.A. (EMBRAER): Amendment 39-12090. Docket 2000-NM-125-AD. Supersedes AD 97-26-06, Amendment 39-10249.

Applicability: All Model EMB-120 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure that the flightcrew is able to recognize the formation of significant ice accretion, which could result in reduced controllability of the airplane in normal icing conditions, accomplish the following:

RESTATEMENT OF CERTAIN REQUIREMENTS OF AD 97-26-06

(a) Within 30 days after January 23, 1998 (the effective date of AD 97-26-06, amendment 39-10249), accomplish paragraphs (a)(1) and (a)(2) of this AD.

AFM Revisions - Limitations Section

(1) Revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following requirements for activation of the ice protection systems. This may be accomplished by inserting a copy of this AD in the AFM.

"TURN ON ICE PROTECTION SYSTEM and IGNITION SWITCHES AS FOLLOWS:

- AOA, TAT, SLIP, ENGINE AIR INLET, and IGNITION SWITCHES:
  - When atmospheric or ground icing conditions exist.

- PROPELLER:
  - When atmospheric or ground icing conditions exist, OR
  - At the first sign of ice formation anywhere on the aircraft.

- WING and TAIL LEADING EDGES, and WINDSHIELD:
  - At the first sign of ice formation anywhere on the aircraft.

NOTE: On takeoff, delay activation of the wing and tail leading edge de-ice systems until reaching the final segment speed.

NOTE: Atmospheric icing conditions exist when:

- Indicated Outside Air Temperature (OAT) during ground operations or Total Air Temperature (TAT) in flight is 10 degrees C or below; and
- Visible moisture in any form is present (such as clouds, fog with visibility of one mile or less, rain, snow, sleet, or ice crystals).

NOTE: Ground icing conditions exist when:

- Indicated OAT during ground operations is 10 degrees C or below; and
- Surface snow, standing water, or slush is present on the ramps, taxiways, or runways.

NOTE: For Operation in Atmospheric Icing Conditions:

- Follow the procedures in the Normal Procedures Section under Operation in Icing Conditions."

AFM Revisions - Normal Procedures Section

(2) Revise the Normal Procedures Section of the FAA-approved AFM to include the following additional and revised information regarding operation in icing conditions. This may be accomplished by inserting a copy of this AD in the AFM.

"Under DAILY CHECKS of the Ice Protection System, add the following:

The following tests must be performed prior to the first flight of the day for which known or forecast icing conditions are anticipated.

Ice Detector System TEST Button (if installed).....PRESS
Check normal test sequence.

Under APPROACH Checklist, add the following:

Minimum Airspeed.....APPROPRIATE TO FLAP POSITION
(See Table Below)

Gear/Flap	Minimum Recommended Airspeed
UP/0°	150 KIAS
UP/15°	130 KIAS

Under OPERATION IN ICING CONDITIONS for FLYING INTO ICING CONDITION, *replace* the current AFM section information for normal icing conditions with the following:

- During flight, monitoring for icing conditions should start whenever the indicated outside air temperature is near or below freezing or when operating into icing conditions, as specified in the Limitations Section of this manual.
- When operating in icing conditions, the front windshield corners (unheated areas), propeller spinners, and wing leading edges will provide good visual cues of ice accretion.
- For airplanes equipped with an ice detection system, icing conditions will also be indicated by the illumination of the ICE CONDITION light on the multiple alarm panel.
- When atmospheric or ground icing conditions exist, proceed as follows:

AOA, TAT, SLIP, and ENGINE AIR INLET ..... ON
IGNITION Switches ..... ON
AIRSPEED (Flaps and Gear UP)..... 60 KIAS MINIMUM

- When atmospheric or ground icing conditions exist, OR
- At the first sign of ice formation anywhere on the aircraft, proceed as follows:

PROPELLER Deicing Switch..... ON
Select NORM mode if indicated OAT is above -10°C (14°F) or COLD mode if indicated OAT is below -10°C (14°F).

- At the first sign of ice formation anywhere on the aircraft, proceed as follows:

WINDSHIELD..... ON
WING and TAIL LEADING EDGE..... ON
Visually evaluate the severity of the ice encounter and the rate of accretion and select light or heavy mode (1-minute or 3-minute cycle) based on this evaluation.

NOTE: On takeoff, delay activation of the wing and tail leading edge de-ice systems until reaching the final segment speed.

NOTE: The minimum NH required for proper operation of the pneumatic deicing system is 80%. At lower NH values, the pneumatic deicing system may not totally inflate, and the associated failure lights on the overhead panel may illuminate. If this occurs, increase NH.

Holding configuration:
Landing Gear Lever..... UP
Flap Selector Lever..... UP
N_P ..... 85% MINIMUM
Increase N_P as required to eliminate propeller vibrations.

Approach and Landing procedure:
Increase approach and landing speeds, according to the following flap settings, until landing is assured. Reduce airspeed to cross runway threshold (50 ft) at V_{REF}.

Flaps 15 - Increase Speed by 10 KIAS (130+10)
Flaps 25 - Increase Speed by 10 KIAS (V_{REF25}+10)
Flaps 45 - Increase Speed by 5 KIAS (V_{REF45}+5)

Go-Around procedure:
Reduce values from Maximum Landing Weight Approach Climb Limited charts by:
1500 lbs. for PW 118 Engines
1544 lbs. for PW 118A and 118B Engines

Flaps 15 - Increase approach climb speed by 10 KIAS (V_2+10);
Decrease approach climb gradient by:
3.0% for PW 118 Engines
2.9% for PW 118A and 118B Engines
Flaps 25 - Increase landing climb speed by 10 KIAS (V_{REF25}+10)
Flaps 45 - Increase landing climb speed by 5 KIAS (V_{REF} +5)

CAUTION: The ice protection systems must be turned on immediately (except leading edge de-icers during takeoff) when the ICE CONDITION light illuminates on the multiple alarm panel or when any ice accretion is detected by visual observation or other cues.

CAUTION: Do not interrupt the automatic sequence of operation of the leading edge de-ice boots once it is turned ON. The system should be turned OFF only after leaving the icing conditions and after the protected surfaces of the wing are free of ice."

NEW REQUIREMENTS OF THIS AD

Ice Detector Installation

(b) For airplanes identified in any of Parts I, II, III, IV, V, and VI of EMBRAER Service Bulletin 120-30-0027, Change 02, dated December 3, 1997; Change 03, dated June 26, 1998; or Change 04, dated July 13, 1999: Within 30 days after the effective date of this AD, install an ice detector system in accordance with the service bulletin.

Alternative Methods of Compliance

(c) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 97-26-06, amendment 39-10249, are approved as alternative methods of compliance with this AD.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The ice detector system installation shall be done in accordance with EMBRAER Service Bulletin 120-30-0027, Change 02, dated December 3, 1997; EMBRAER Service Bulletin 120-30-0027, Change 03, dated June 26, 1998; or EMBRAER Service Bulletin 120-30-0027, Change 04, dated July 13, 1999. EMBRAER Service Bulletin 120-30-0027, Change 04, dated July 13, 1999, contains the following list of effective pages:

Page Number	Change Level Shown on Page	Date Shown on Page
1-4, 27-40, 43,44, 67, 68, 93, 94	04	July 13, 1999
5-26, 41, 42, 45-66,69-92, 95-108	03	June 26, 1998

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343 - CEP 12.225, Sao Jose dos Campos - SP, Brazil. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in Brazilian airworthiness directive 97-06-03R1, dated December 15, 1997.

Effective Date

(f) This amendment becomes effective on March 5, 2001.

FOR FURTHER INFORMATION CONTACT: Thomas Peters, Aerospace Engineer, Systems and Flight Test Branch, ACE-116A, FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6063; fax (770) 703-6097.

Issued in Renton, Washington, on January 17, 2001.

Dorenda D. Baker, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2001-03

BOEING
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2001-02-07 BOEING: Amendment 39-12091. Docket 99-NM-365-AD.

Applicability: Model 767 series airplanes powered by Pratt & Whitney engines, line numbers 1 through 663 inclusive, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut, accomplish the following:

Modifications

(a) When the airplane has reached the flight cycle threshold as defined by the flight cycle threshold formula described in Figure 1 of Boeing Service Bulletin 767-54-0080, dated October 7, 1999, or within 20 years since the date of manufacture, whichever occurs first: Modify the nacelle strut and wing structure on both the left and right sides of the airplane, in accordance with the service bulletin. Use of the flight cycle threshold formula described in Figure 1 of the service bulletin is an acceptable alternative to the 20-year threshold, provided the corrosion prevention and control program inspections, as described in paragraphs 1 and 2 of Figure 1, have been met.

(b) Prior to or concurrently with the accomplishment of the modification of the nacelle strut and wing structure required by paragraph (a) of this AD; as specified in paragraph 1.D., Table 2, on page 8 of Boeing Service Bulletin 767-54-0080, dated October 7, 1999; accomplish the actions specified in Boeing Service Bulletins 767-54-0069, Revision 1, dated January 29, 1998, or Revision 2, dated August 31, 2000; 767-54-0083, dated September 17, 1998; 767-54-0088, Revision 1, dated July 29, 1999; 767-54A0094, Revision 1, dated September 16, 1999; 767-57-0053, Revision 2, dated September 23, 1999; and 767-29-0057, dated December 16, 1993, including Notice of Status Change NSC 1, dated November 23, 1994; as applicable; in accordance with those service bulletins. Accomplishment of this paragraph constitutes terminating action for the repetitive inspections required by AD 94-11-02, amendment 39-8918, and AD 99-07-06, amendment 39-11091.

Note 2: Paragraph (b) of this AD specifies prior or concurrent accomplishment of Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999; however, Table 2, on page 8 of Boeing Service Bulletin 767-54-0080, dated October 7, 1999, specifies prior or concurrent accomplishment of the original issue of the service bulletin. Therefore, accomplishment of the applicable actions specified in Boeing Service Bulletin 767-57-0053, dated June 27, 1996, or Revision 1, dated October 31, 1996, prior to the effective date of this AD, is considered acceptable for compliance with the actions required by paragraph (b) of this AD.

Repair

(c) If any damage (corrosion or cracking) to airplane structure is found during the accomplishment of the modification required by paragraph (a) of this AD; and the service bulletin specifies to contact Boeing for appropriate action: Prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the FAA to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (c) of this AD, the actions shall be done in accordance with the following Boeing service bulletins, as applicable:

Service Bulletin Number	Revision Level	Date
767-54-0080	Original	October 7, 1999
767-54-0069	1	January 29, 1998
767-54-0069	2	August 31, 2000
767-54-0083	Original	September 17, 1998
767-54-0088	1	July 29, 1999
767-54A0094	1	September 16, 1999
767-57-0053	2	September 23, 1999
767-29-0057	Original	December 16, 1993
767-29-0057 NSC 1	Original	November 23, 1994

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) This amendment becomes effective on March 5, 2001.

FOR FURTHER INFORMATION CONTACT: James Rehrl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2783; fax (425) 227-1181.

Issued in Renton, Washington, on January 17, 2001.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2001-03

SHORT BROTHERS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2001-02-08 SHORT BROTHERS PLC: Amendment 39-12092. Docket 99-NM-226-AD.

Applicability: All Model SD3-60 SHERPA, SD3-SHERPA, SD3-30, and SD3-60 series airplanes; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent ice accumulation on the airplane leading edges, which could reduce controllability of the airplane, accomplish the following:

Modification

(a) Within 1 year after the effective date of this AD, replace the flight deck pneumatic de-icing boot pressure indicator switch with a switch that activates the flight deck indicator light at 15 pounds per square inch gage, in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(d) This amendment becomes effective on February 20, 2001.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on January 18, 2001.
Dorenda D. Baker, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2001-03

BOEING
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2001-02-09 BOEING: Amendment 39-12093. Docket 2000-NM-184-AD. Supersedes AD 97-06-04, Amendment 39-9961.

Applicability: Model 757-200 series airplanes having line numbers 1 through 736 inclusive, powered by Rolls Royce engines, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (n) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the lower spar chord, which could result in reduced structural integrity of the engine strut, accomplish the following:

RESTATEMENT OF REQUIREMENTS OF AD 97-06-04:

Repetitive Inspections

(a) Prior to the accumulation of 15,000 total flight cycles, or within 60 days after March 28, 1997 (the effective date of AD 97-06-04, amendment 39-9961), whichever occurs later: Perform an eddy current inspection to detect cracking on the free edge of the tang, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999. Repeat this inspection thereafter at intervals not to exceed 3,000 flight cycles until the inspection required by paragraph (d) of this AD is accomplished.

NOTE 2: The inspection required by paragraph (a) of this AD need not be performed on airplanes on which the inspection required by paragraph (d) of this AD is performed prior to the compliance time specified in paragraph (a) of this AD.

Follow-On Actions

(b) If any cracking is found during the inspection required by paragraph (a) of this AD, and the cracking is within the limits specified in Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999: Prior to further flight, remove the midchord channels, stop-drill the cracking, and install a repair in accordance with the service bulletin. No further action is required by paragraph (a) of this AD.

(c) If any cracking is found, and the cracking is outside the limits specified in Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999: Prior to further flight, replace the lower spar chord with a new or serviceable chord in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA.

Bolt Hole Inspection

(d) Perform an eddy current inspection (bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999, at the time

specified in paragraph (d)(1) or (d)(2) of this AD, as applicable. Accomplishment of this inspection terminates the inspections required by paragraph (a) of this AD.

(1) For airplanes on which the stiffening straps have been removed from the midchord in accordance with Boeing Service Bulletin 757-54-0028 prior to the effective date of this AD: Accomplish the inspection at the time specified in Paragraph 1.D. ("Description") of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(2) For airplanes other than those identified in paragraph (d)(1) of this AD: Accomplish the inspection prior to the accumulation of 18,000 total flight cycles, or within 60 days after March 28, 1997, whichever occurs later.

(e) Accomplish either paragraph (e)(1) or (e)(2) of this AD, as applicable, in accordance with Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(1) If any fastener installed as a result of an inspection required by paragraph (d) of this AD has a diameter of 5/8-inch or greater: Install the repair prior to the accumulation of the number of flight cycles specified in the "Subsequent Inspection Interval" column of the Threshold Table included in Paragraph 1.E. ("Compliance") of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(2) If any fastener installed as a result of an inspection required by paragraph (d) of this AD has a diameter of less than 5/8-inch: Repeat the bolt hole inspection required by paragraph (d) of this AD prior to the accumulation of the number of flight cycles specified in the "Subsequent Inspection Interval" column of the Threshold Table included in Paragraph 1.E. ("Compliance") of the service bulletin until the repair specified in paragraph (h) of this AD is installed.

Optional Terminating Action

(f) Installation of the repair in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999, constitutes terminating action for the requirements in paragraphs (a) and (d) of this AD.

NEW REQUIREMENTS OF THIS AD:

Revised Service Information

(g) Except as provided by paragraphs (c) and (l)(3) of this AD: As of the effective date of this new AD, Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999, must be used for accomplishment of the actions required by this AD.

Second Bolt Hole Inspection

(h) Within 6,000 flight cycles after accomplishment of paragraph (d) of this AD, or within 60 days after the effective date of this AD, whichever occurs later: Perform a second eddy current inspection (bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with Part IV of the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999. If no cracking is found during the inspection required by this paragraph, no further action is required by this paragraph.

Third Bolt Hole Inspection

(i) After accomplishment of the inspection required by paragraph (h) of this AD, when the airplane has reached the flight cycle threshold as defined by the flight cycle threshold formula on page 9, Paragraph 1.E. ("Compliance") of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999: Perform a third eddy current inspection (bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with Part II of the Accomplishment Instructions of the service bulletin.

Fourth Bolt Hole Inspection

(j) If, after accomplishment of the inspection required by paragraph (i) of this AD, paragraph (m) of this AD has not yet been accomplished: When the airplane has reached the flight cycle threshold as defined by the flight cycle threshold formula on page 9, Paragraph 1.E. ("Compliance") of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999; perform a fourth eddy current inspection

(bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with Part II of the Accomplishment Instructions of the service bulletin.

Follow-On Actions

(k) If no cracking is found during any inspection required by paragraph (d), (i), or (j) of this AD, prior to further flight, increase the diameter of the holes by the dimensions specified in the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999, and install new fasteners in accordance with the service bulletin.

(l) If any cracking is found during any inspection required by paragraph (d), (h), (i), or (j) of this AD, prior to further flight, accomplish paragraph (l)(1), (l)(2), or (l)(3) of this AD, as applicable, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(1) If the cracking can be removed by increasing the diameter of the hole in accordance with the service bulletin: Increase the diameter of the hole by the dimensions specified in the Accomplishment Instructions of the service bulletin, and install new fasteners in accordance with the service bulletin.

(2) If the cracking cannot be removed by increasing the diameter of the hole in accordance with the Accomplishment Instructions of the service bulletin, but the cracking is within the limits specified in the service bulletin: Install the repair in accordance with the service bulletin. No further action is required by paragraph (d) of this AD.

(3) If the cracking is outside the limits specified in the service bulletin: Replace the lower spar chord with a new or serviceable chord in accordance with a method approved by the Manager, Seattle ACO.

Optional Terminating Modification

(m) Accomplishment of the modification of the nacelle strut and wing structure as required by AD 99-24-07, amendment 39-11431, constitutes terminating action for the requirements of this AD.

Alternative Methods of Compliance

(n) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(o) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(p) Except as provided by paragraphs (c) and (l)(3) of this AD, the required actions shall be done in accordance with Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996; or Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999; as applicable.

(1) The incorporation by reference of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999, is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, was approved previously by the Director of the Federal Register as of March 28, 1997 (62 FR 11760, March 13, 1997).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(q) This amendment becomes effective on March 5, 2001.

FOR FURTHER INFORMATION CONTACT: Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2776; fax (425) 227-1181.

Issued in Renton, Washington, on January 18, 2001.
Dorenda D. Baker, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2001-03

CFM INTERNATIONAL
AIRWORTHINESS DIRECTIVE
ENGINE
LARGE AIRCRAFT

2001-02-12 CFM International: Amendment 39-12097. Docket No. 2001-NE-03-AD.

Applicability

This airworthiness directive (AD) is applicable to all CFM International (CFMI) model CFM56-7B turbofan engines except for engines with serial numbers DAC 876-747 and higher, and SAC 888-XXX and 889-XXX: 166-168, 172-173, 175-178, 180 and higher. These engines are installed on, but not limited to, Boeing 737NG airplanes.

Note 1: This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Compliance with this AD is required within 25 days after the effective date of this AD, unless already done.

To prevent air leakage from incorrectly torqued fittings of the PS3 pressure line, which could result in engine power loss, do the following:

(a) Check for and apply the correct torque in the tightening direction of all PS3 pressure line fittings as identified in Figure 1 of this AD as Joint 1, Joint 2, Joint 3, Joint 4, Joint 5, and Joint 6 as follows:

Note 2: CFM International Service Bulletin, CFM56-7B S/B 75-0005, dated January 22, 2001, and the CFM56 Standard Practice Manual, CFMI-TP.SP.2, contain information on torquing the PS3 pressure line fittings, including supporting the pressure line from countertorque.

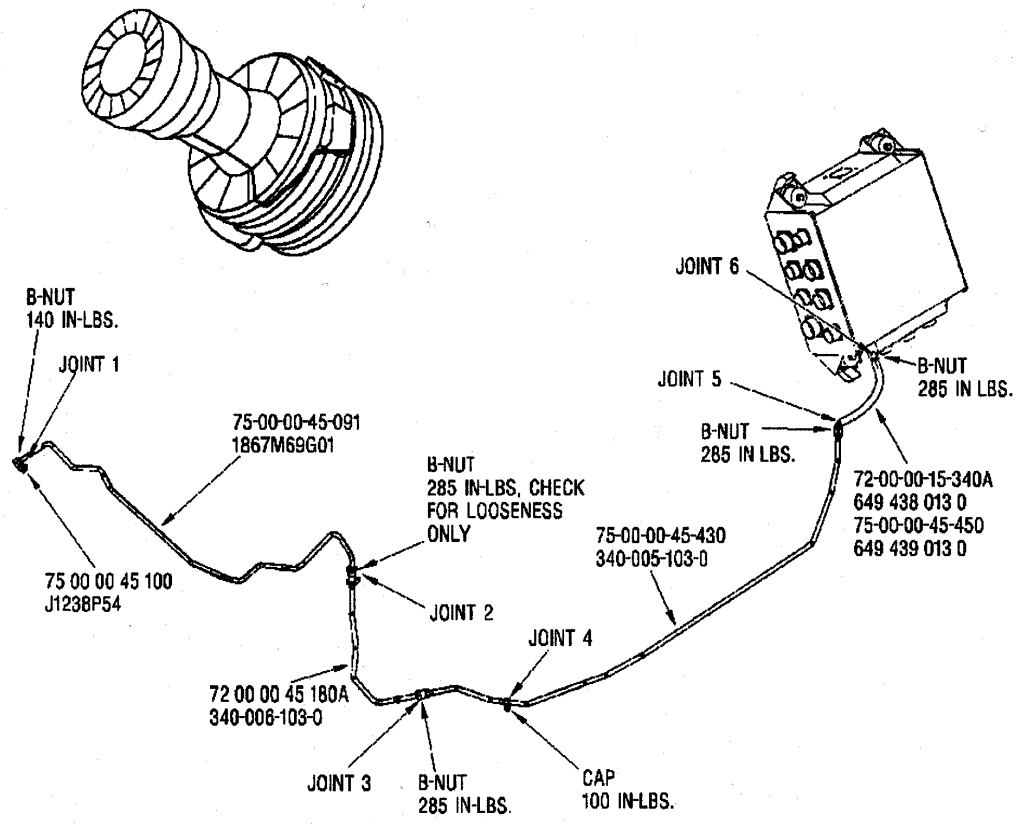
(1) Torque Joint 1 to ensure a torque value of 140 inch-pounds.

(2) Due to accessibility limitations, check Joint 2 for finger looseness, and only if loose, torque to a value of 285 inch-pounds.

(3) Torque Joint 3, Joint 5, and Joint 6 to ensure a torque value of 285 inch-pounds.

(4) Torque Joint 4 to ensure a torque value of 100 inch-pounds.

Figure 1. Torque Values for PS3 Line Fittings



Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

Effective Date of This AD

(d) This amendment becomes effective on February 14, 2001.

FOR FURTHER INFORMATION CONTACT: Diane Cook, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone 781-238-7133, fax 781-238-7199.

Issued in Burlington, Massachusetts, on January 23, 2001.
Thomas A. Boudreau, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

BW 2001-03

EMPRESA BRASILEIRA DE AERONAUTICA S.A.
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2001-02-51 EMPRESA BRASILEIRA DE AERONAUTICA S.A. (EMBRAER): Amendment 39-12101. Docket 2001-NM-16-AD.

Applicability: Model EMB-145 and EMB-135 series airplanes, certificated in any category; having any serial number listed below:

145004 through 145103 inclusive
145105 through 145121 inclusive
145123 through 145139 inclusive
145141 through 145153 inclusive
145155 through 145189 inclusive
145191 through 145256 inclusive
145258 through 145262 inclusive
145264 through 145349 inclusive
145351 through 145362 inclusive
145364
145366 through 145369 inclusive

Compliance: Required as indicated, unless accomplished previously.

To prevent high pitch control forces, which could result in possible loss of control of the airplane, accomplish the following:

AFM Revision

(a) Within 3 days after the effective date of this AD, revise the FAA-approved Airplane Flight Manual (AFM), as specified by paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this AD. This may be accomplished by inserting a copy of this AD into the AFM.

(1) Revise the Limitations Section of the AFM, under "FLIGHT CONTROLS," to include the following.

"PITCH TRIM
Maximum Airspeed after Takeoff/During Climb without Retrimming.....160 KIAS"

(2) Revise the Emergency Procedures Section of the AFM, under "PITCH TRIM INOPERATIVE," to delete the current information and replace it with the following:

"PITCH TRIM INOPERATIVE
EICAS WARNING: PIT TRIM 1(2) INOP (may be presented)
EICAS CAUTION: AUTO TRIM FAIL (may be presented)
If at least one Message is presented:

Affected Pitch Trim System..... OFF
Continue the flight with the remaining Pitch Trim System.

If both Pitch Trim Systems are inoperative:
Pitch Trim Main System ..... OFF
Pitch Trim Back Up System..... OFF
Consider landing at the nearest suitable airport.

If no Message is presented:
Pitch Trim Command ..... CHECK ALL SWITCHES

If any Pitch Trim command is reestablished:
Continue the flight with the remaining Pitch Trim System.

NOTE: When Main Pitch Trim System is INOP, Autopilot is not available.
WARNING: IF PITCH TRIM COMMAND IS NOT REESTABLISHED, DO NOT OPEN SPEEDBRAKE.

If pitch trim command is not reestablished and the airplane presents a NOSE UP tendency:
Airspeed..... REDUCE

Airspeed reduction alleviates control column forces and may permit Pitch Trim command to be recovered.

NOTE: Turning the airplane and extending the landing gear helps to maintain minimum airspeed with unwanted pitch up tendency.

If it is necessary to reduce airspeed below 180 KIAS (or 200 KIAS in icing conditions), extend flaps to 9° (at 20,000 ft maximum).
If it is necessary to reduce airspeed below 160 KIAS, extend flaps to 22°.
Pitch Trim Command ..... CHECK ALL SWITCHES

If pitch trim is recovered, retrim the airplane and proceed with flight normally.

If pitch trim is not recovered:
Consider landing at the nearest suitable airport.
Approach and landing configuration:
Landing Gear..... DOWN
Flaps ..... 22°
Airspeed..... $V_{REF\ 45}$ + 10 KIAS

CAUTION: TO DETERMINE THE MINIMUM SUITABLE LANDING DISTANCE, MULTIPLY THE UNFACTORED LANDING DISTANCE FOR FLAPS 45° BY 1.27.

If pitch trim command is not reestablished and the airplane presents a NOSE DOWN tendency:
Airspeed..... REDUCE AS REQUIRED
Below 250 KIAS:
Flaps (at 20,000 ft maximum) ..... 9°
Below 200 KIAS:
Flaps..... 22°

Approach and landing configuration:
Landing Gear..... DOWN
NOTE: Gear extension should be delayed as long as possible.
Flaps ..... 22°
Airspeed..... $V_{REF\ 45}$ + 25 KIAS

CAUTION: TO DETERMINE THE MINIMUM SUITABLE LANDING DISTANCE, MULTIPLY THE UNFACTORED LANDING DISTANCE FOR FLAPS 45° BY 1.44."

(3) Revise the Normal Procedures Section of the AFM, under the "BEFORE START" checklist, to delete the current information and insert the following:

"Trims..... CKD/SET

Actuate the pilot and copilot's Pitch Trim Switches and the backup pitch trim switch nose up and then nose down, and check correct indication on the EICAS. Hold trim input to verify that the trim motion stops after approximately 3 seconds. Set the pitch trim to the units required for takeoff. Set the roll and yaw trims to zero.

PITCH TRIM UNITS	8	7	6	5	4
CG POSITION (%)	LESS THAN 25	30	35	40	43

(4) In the Normal Procedures Section of the AFM, under the "AFTER TAKEOFF" checklist, add the following:

"Pitch Trim..... AS REQUIRED
Keep the airplane trimmed to avoid excessive loads on the Horizontal Stabilizer Actuator (HSA). The airplane should be trimmed before 160 KIAS."

Note 1: Incorporation of EMB145 AFM 145/1153, Revision 43, dated January 11, 2001, is also acceptable for compliance with the requirements of paragraph (a) of this AD.

Placard Installation

(b) Within 3 days after the effective date of this AD, install placards P/N 145-46718-001 at two positions on the main control panel within the pilot's primary field of view.

Note 2: Installation per EMBRAER Alert Service Bulletin 145-27-A077, dated January 8, 2001, is also acceptable for compliance with the requirements of paragraph (b) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager,Atlanta Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Operations Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Note 4: The subject of this AD is addressed in Brazilian emergency airworthiness directive 2001-01-01, dated January 18, 2001.

Effective Date

(e) This amendment becomes effective on February 7, 2001, to all persons except those persons to whom it was made immediately effective by emergency AD 2001-02-51, issued January 19, 2001, which contained the requirements of this amendment.

FOR FURTHER INFORMATION CONTACT: Carla Worthey, Program Manager, Program Management and Services Branch, ACE-118A, FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6062; fax (770) 703-6097.

Issued in Renton, Washington, on January 26, 2001.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2001-03

ISRAEL AIRCRAFT INDUSTRIES
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2001-03-01 ISRAEL AIRCRAFT INDUSTRIES, LTD.: Amendment 39-12102. Docket 2001-NM-14-AD.

Applicability: All Model Galaxy airplanes, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent the main entry door from jamming, which could impede the safe evacuation of passengers and crew during an emergency, accomplish the following:

Revisions of the Airplane Flight Manual (AFM)

(a) Within 10 days after the effective date of this AD, revise the the FAA-approved AFM to include the following statements under Section II, Emergency Procedures, Passenger Evacuation, item 5., "Main entrance door/emergency exit - OPEN." This may be accomplished by inserting a copy of this AD into the AFM.

> "If the main entrance door is jammed in a partially opened state, the door may be opened by pushing it out with a force of approximately 88 lbs. This will bend the aircraft sill and skin, allowing the door to open in an emergency."

(b) Within 10 days after the effective date of this AD, revise the AFM to include the following statements under Section IV, Normal Procedures, Exterior Inspection, Passenger Compartment, item 4.c., "Passenger briefing – COMPLETE, Emergency procedures." This may be accomplished by inserting a copy of this AD into the AFM.

> "When opening the main entrance door from inside the aircraft, the operating handle must be rotated all the way up in one continuous motion, as shown on the placard. If the handle is left at an intermediate position, it may cause the door to slip down and jam in a vertical, unlocked position, preventing egress. The handle is also jammed in the process. The door may be released be exerting a high upwards force on the operating handle or by assistance from outside the airplane.
>
> If the main entrance door is jammed in a partially opened state, the door may be opened by pushing it out with a force of approximately 88 lbs. This will bend the aircraft sill and skin, allowing the door to open in an emergency."

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA. Operators shall submit their requests through an appropriate FAA Principal Operations Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 1: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Note 2: The subject of this AD is addressed in emergency Israeli airworthiness directive 52-00-12-15, dated January 2, 2001.

Effective Date

(e) This amendment becomes effective on February 20, 2001.

FOR FURTHER INFORMATION CONTACT: Tim Dulin, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2141; fax (425) 227-1149.

Issued in Renton, Washington, on January 29, 2001.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2001-03

PRATT & WHITNEY CANADA
AIRWORTHINESS DIRECTIVE
ENGINE
LARGE AIRCRAFT

2001- 03-02 Pratt & Whitney Canada: Amendment 39-12103 Docket No. 2000-NE-51-AD.

Applicability:

Pratt & Whitney Canada (PWC) models PW306A and PW306B turbofan engines with compressor rotor 2nd, 3rd, and 4th stage drum assembly part numbers (P/N's) 30B4149-01, 30B4539-01, and 30B4725-01, and impellers P/N's 30B4183-01, 30B4494-01, and 30B4564-01 installed. These engines are installed on but not limited to Dornier Luftfahrt GmbH 328-300 Jet, and Israel Aircraft Industries, LTD. Galaxy airplanes.

Note 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Compliance with this AD is required as indicated, unless already done.

To prevent premature cracking of compressor rotor 2nd, 3rd, and 4th stage drum assemblies and impellers which could result in an uncontained engine failure and damage to the airplane, accomplish the following:

Compressor Rotor 2nd, 3rd, and 4th Stage Drum Assembly, and Impeller New Life Limit

(a) Remove compressor rotor 2nd, 3rd, and 4th stage drum assembly P/N's 30B4149-01, 30B4539-01, or 30B4725-01, and impeller P/N's 30B4183-01, 30B4494-01, or 30B4564-01 before exceeding their new life limits in Table 1, and replace with serviceable parts.

Table 1. New Life Limits.

Engine Model	Part Name	Part Numbers	Flight Count Factor	Life Limit in Cycles
PW306A	Compressor Rotor 2nd, 3rd, and 4th Stage Drum Assembly	30B4149-01	0.9	3,000
		30B4539-01	0.9	3,000
		30B4725-01	0.9	3,000
	Impeller	30B4183-01	0.9	3,000
		30B4494-01	0.9	3,000
		30B4564-01	0.9	3,000
PW306B	Compressor Rotor 2nd, 3rd, and 4th Stage Drum Assembly	30B4149-01	1.0	3,000
		30B4539-01	1.0	3,000
		30B4725-01	1.0	3,000
	Impeller	30B4183-01	1.0	3,000
		30B4494-01	1.0	3,000
		30B4564-01	1.0	3,000

Use of Flight Count Factor

(b) For PW306A engines only, multiply number of flights (takeoffs and landings) by 0.9 to determine cycles.

Examples: 3,333 (flights) x 0.9 (flight count factor) = 3,000 cycles.
2,850 (flights) x 0.9 (flight count factor) = 2,565 cycles.

(c) Except as provided for in paragraph (d) of this AD, do not install any part identified by P/N in paragraph (a) of this AD, that exceed the new life limit.

Alternative Method of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date of this AD

(f) This amendment becomes effective on February 21, 2001.

FOR FURTHER INFORMATION CONTACT: James Rosa, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: 781 238-7152; fax: 781 238-7199.

Issued in Burlington, MA, on January 30, 2001
David A. Downey, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

BW 2001-03

BOMBARDIER, INC.
AIRWORTHINESS DIRECTIVE
EMERGENCY
LARGE AIRCRAFT

2001-03-52 BOMBARDIER INC. (Formerly Canadair): Docket No. 2001-NM-27-AD.

Applicability: Model CL-600-2B16 (CL-604) series airplanes, serial numbers 5301 through 5489, inclusive; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent fuel migration under conditions of acceleration and/or climb, which could result in the airplane exceeding the aft center of gravity limit, and consequent loss of control of the airplane, accomplish the following:

(a) Within 5 days after receipt of this AD, revise the Limitations and Abnormal Procedures Sections of the Canadair Challenger CL-604 Airplane Flight Manual PSP-606-1, by inserting a copy of Temporary Revision No. 604/13, dated February 1, 2001 (reference Appendix 1 of this AD), into the AFM.

(b) When the information in Temporary Revision (TR) No. 604/13, dated February 1, 2001, has been incorporated into FAA-approved general revisions of the AFM, the general revisions may be inserted in the AFM, and the TR may be removed from the AFM.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

NOTE 1: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

NOTE 2: The subject of this AD is addressed in Canadian airworthiness directive CF-2001-07, dated February 2, 2001.

(d) **AD 2001-03-52, issued on February 2, 2001, becomes effective upon receipt.**

FOR FURTHER INFORMATION CONTACT: James E. Delisio, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York; telephone (516) 256-7521; fax (516) 568-2716.

Issued in Renton, Washington, on February 2, 2001.
Original signed by: Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

15/05/95

canadair challenger	TEMPORARY REVISION 604/13	Page 1 of 3
		TR 604/13

LETTER OF TRANSMITTAL

REASON FOR ISSUE

Temporary revision to advise the flight crew of the following:

- Due to fuel migration under conditions of acceleration and/or climb, there is a possibility that the airplane may exceed the aft Center of Gravity Limit.

INSTRUCTIONS FOR INSERTION OF THIS TEMPORARY REVISION

(1) Insert the Record of Temporary Revisions in the front portion of the Airplane Flight Manual.

(2) Insert this Temporary Revision in the Airplane Flight Manual as instructed at the top of the page.

(3) Record the insertion of this Temporary Revision on the Record of Temporary Revisions page.

(4) Retain this page for record purposes.

LIST OF PAGES AFFECTED BY THIS TEMPORARY REVISION

- 02–03–1, and
  02–03–2.

15/05/95

canadair challenger	TEMPORARY REVISION 604/13	Page 2 of 3
		TR 604/13

INSERT IN LIMITATIONS
FACING PAGE 02–03–1

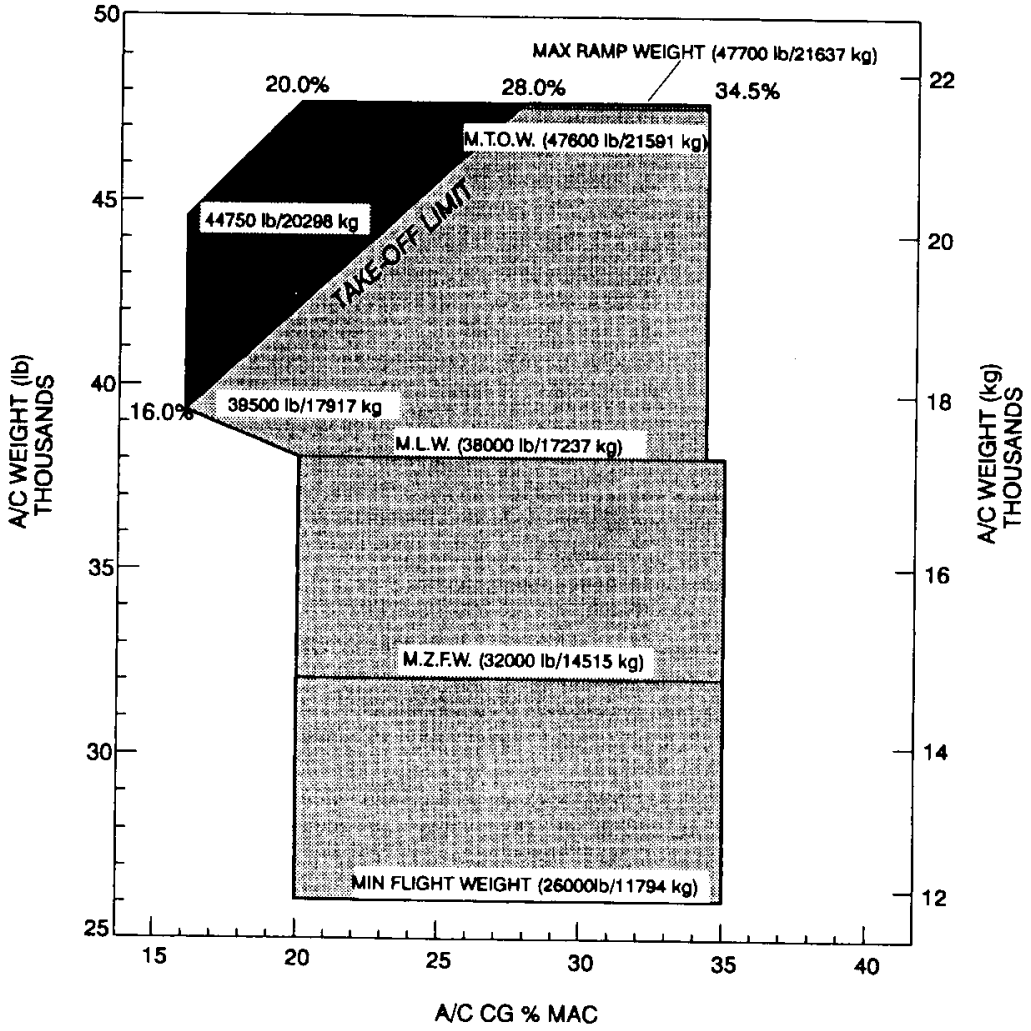
REASON FOR ISSUE

Temporary revision to advise the flight crew of the following:

- Due to fuel migration under conditions of acceleration and/or climb, there is a possibility that the airplane may exceed the aft Center of Gravity Limit.

ACTION

Pending rectification, replace figure 02–03–1 with the attached new figure 02–03–1.



Centre of Gravity Limits (MTOW 47,600 lbs)
Figure 02–03–1

DOT Approved	CL-604 Airplane Flight Manual PSP 604–1	

15/05/95

canadair challenger	TEMPORARY REVISION 604/13	Page 3 of 3 TR 604/13

INSERT IN LIMITATIONS
FACING PAGE 02–03–2

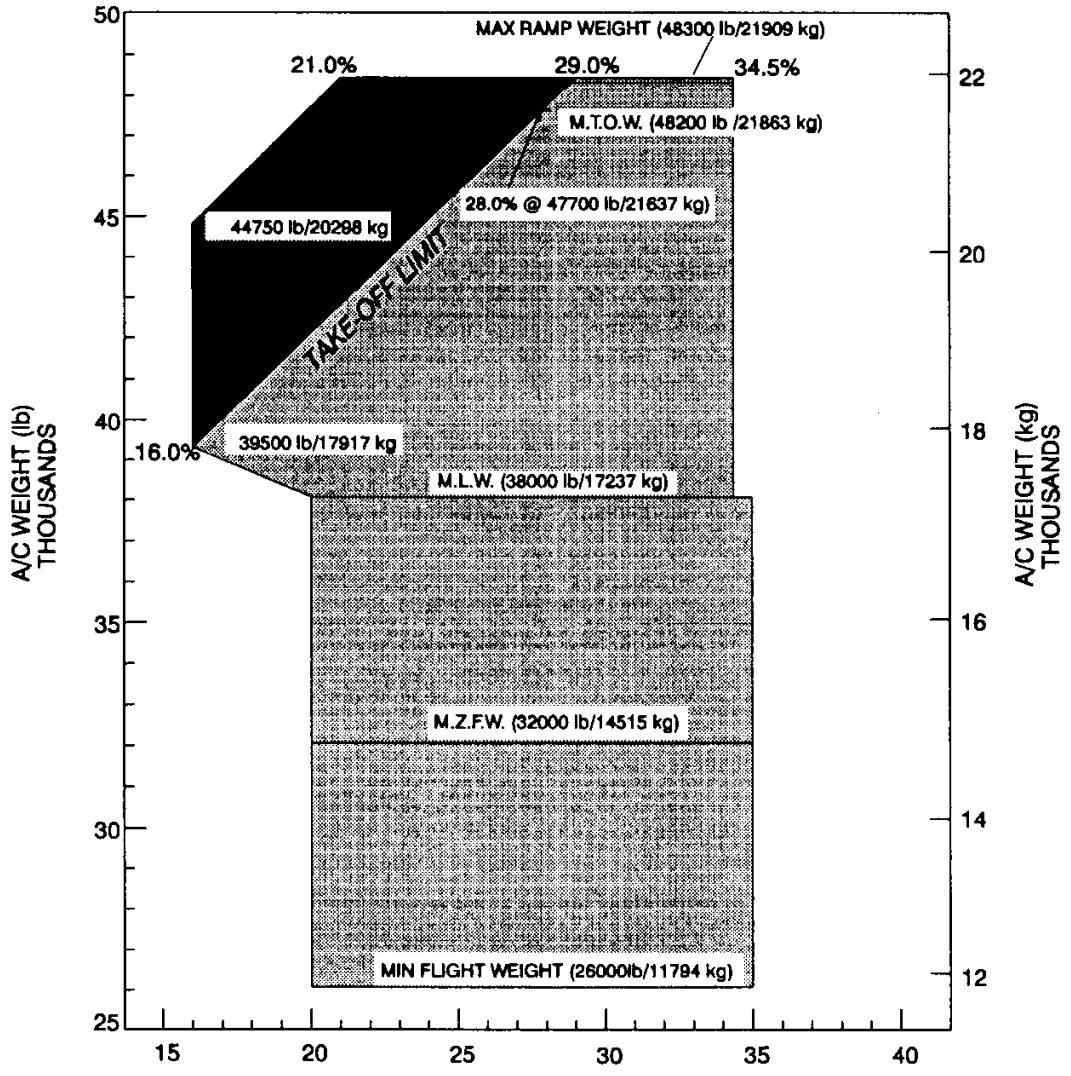
REASON FOR ISSUE

Temporary revision to advise the flight crew of the following:

- Due to fuel migration under conditions of acceleration and/or climb, there is a possibility that the airplane may exceed the aft Center of Gravity Limit.

ACTION

Pending rectification, replace figure 02–03–2 with the attached new figure 02–03–2.



Centre of Gravity Limits (MTOW 48,200 Lbs)
Figure 02–03–2

DOT Approved	CL-604 Airplane Flight Manual PSP 604–1	